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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,157	12/31/2003	Kiyokazu Shuku	2003-1841A	6970
513	7590	07/28/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			EINSMANN, MARGARET V	
		ART UNIT		PAPER NUMBER
				1751

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/748,157	SHUKU ET AL.	
	Examiner Margaret Einsmann	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-4 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1- 4 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a process as claimed wherein the crosslinking agent contains 1-8 wt% of said pyrimidine compound, does not reasonably provide enablement for the process wherein more than 8 wt% of the pyrimidine compound is used. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Applicant states in paragraph [0020], "if the amount is less than 1 wt%, as shown in the below-described Comparative Example 3, sufficient pilling resistance would not be obtained. Also, if more than 8 wt%, the cross-linking agent would be excessively supplied and remain unreacted. This is a waste of reaction agents." Since applicant states that the amount of the pyrimidine compound used is critical, both ends of the range must be claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 the term "1% or over" is indefinite because it fails to give an upper limit of the percentage of the pyrimidine compound.

Claim 1 fails to give antecedent basis for 2,6-dichloro-4-aminopyrimidine or 2-amino-4,6-dichloropyrimidine as claimed in claim 2. The examiner suggests that a term such as "where the pyrimidine ring is optionally substituted with amino..." be added to claim 1.

There was no art found to reject the claims. It is known that dichloropyrimidine substituents on reactive dyes react with protein fiber materials. One example of this is **Seitz et al., US 4,680,384** which teaches a method of dyeing wool with dichloropyrimidine reactive dyes. In dyeing method III in col 61 lines 28-54, wool is dyed with a dye having a dichloropyrimidine reactive group in a weakly acidic dyebath and then the dyebath is brought to a pH of 8.5 by adding ammonia. It is well known to fix reactive dyes by the addition of alkali, and this is an example of that process. This example differs from the claims because the wool is not treated with the compounds as claimed in claims 1 or claim 2, but with a reactive dye having a dichloropyrimidine as a reactive group, and there is no mention of the dyes having an anti-pilling effect on the wool fibers.

JP 3121377 B2 discloses a process of crosslinking keratinous fibers (hair) which uses a first liquid containing a compound having a six membered ring and a second liquid having an alkali. See abstract. The compound having the six-membered ring may be 2,4-dichloropyrimidine or 2,4,6-trichloropyrimidine as claimed. This reference shows that the two claimed compounds have been used as a crosslinking compound for hair. There is no mention of an anti-pilling effect.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is 571-272-1314. The examiner can normally be reached on 7:00 AM -4:30 PM M-W and alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571-272-1316.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

7/22/05

Margaret Einsmann
Margaret Einsmann
Primary Examiner
Art Unit 1751